

some of the best material they have on hand, dry it carefully in news papers, placed between smooth board^s, and if they will then notify Pres. J. W. Paxman, who is the executive committee man from Utah, the exhibit can be assembled and placed in shape.

There will be an exhibit from the various experimental arid farms of the state, and in addition to this the farmers should become interested in this matter and assist in advertising Utah's resources along these lines. This is a golden opportunity, and we hope that the farmers generally will respond to this notice and make an effort to assist in this work.

SOME PERNICIOUS UTAH WEEDS.

By the Editor.

Job said, "Let thistles grow instead of wheat and cockle instead of barley."

June Grass.

One of the great enemies to dry farming during this present season has been the appearance of what is commonly called June Grass, in the wheat fields. This grass is properly *Bromus Tectorum* or false Brome grass.

An extended observation over several counties has failed to show this grass in any fields where a proper fallow was observed last season. The damage therefore, is obvious, and we have here another reason for a summer fallow, that of getting rid of this pernicious grass.

In Davis County we saw one field where the grass stood up much higher than the wheat. It takes the moisture out of the ground, and because of the long coarse awns, it is practically worthless after reaching maturity. This grass covers the hillsides of the greater part of the state, and is probably the worst weed that the farmers of Utah have to contend with at the present time.

THE RUSSIAN THISTLE.

One of the weeds that is gradually spreading in this state is the Russian thistle. At one time the Russian thistle was the subject of a great many articles, and was believed by a great many people to be one of the

worst weeds that the farmer would have to contend with. It does very much damage on poorly cultivated farms; in irrigated sections it causes considerable trouble because it fills the ditches and clogs the flumes.

The writer of this article does not believe the Russian thistle is a particularly bad weed to contend with. It matures very late in the season and is easily killed by cutting it off just below the crown.

This weed is not a thistle at all, but is a tumble weed and belongs to the Goose-foot family.

Fox Tail.

The weed commonly known in Utah as Fox Tail is one of our worst weeds. This is another misnamed weed since it is not the real fox tail grass at all. It is sometimes referred to as the wild barley grass, and this is also a misnomer. Properly the grass is known as the squirrel tail grass. It is especially prominent in our alfalfa fields, and particularly on those farms that receive too much irrigation.

It is an annual, in other words, it forms its regular crop of seed and beards in one year's growth from the seed. When it is cut, however, it undoubtedly lives more than one year. When it is young, the plants make fairly good feed for stock, but as soon as the heads are formed it becomes dangerous on account of the beards. In the alfalfa fields, it is always an indication that the farmer does not disc his field. Proper discing and cultivation frequently recommended in the "Farmer" will clear any lucern field, no matter how badly infested, of this troublesome grass.

ALMOST CRIMINAL WASTE.

That is the waste of fertility. The farmer who will so manage his farm that it is steadily decreasing in productive power is a sinner against the bounty of the Creator and the well-being of society. It amounts almost to a crime against future generations. Prof. Shaler of Harvard University says: "Of all the sinful wastes of man's inheritance on earth, and all are in this regard sinners, the very worst are the people of America." Hoard's Dairyman has put the question in another form when it has

repeatedly said: "That from the Atlantic coast to the Rocky Mountain the American farmer has blazed a pathway of destruction to fertility and forests."

Every individual farmer should take this lesson to himself. The fifty thousand farmers who read Hoard's Dairyman should at once institute measures of reform. To the extent of their number they are responsible to the whole for the truth of this indictment. Every single farmer has a chance to stem this tide of destruction so far as he is concerned. Let him set at work at once to study this question of fertility. Certainly he has not knowledge enough now, for fully 99 out of every 100 are sending their farms back not forward in the scale of fertility. That shows of itself that the 99 have not the knowledge they should have. The hundredth man does better because he knows better. We must have better knowledge concerning the soil.

Then we must be willing to spend a part of our income in bringing up the farm. We must buy phosphate, ground skinning stone and potash. We must stop skinning the farm for the last cent we can get in product. If we farm it for an increase in fertility, it will not be long before we will have an increased revenue. But our present way of thinking and doing is sure to result in a constantly decreasing revenue. What makes all food products so high? Largely because of the lessened product per acre.

That is a factor that is working all the time. New ground with all its virgin fertility is not broken fast enough to make up for the lessened production of the old soil. And the population is increasing tremendously. The farmers who have brains to see these things are waking up and it is time they did.—Hoard's Dairyman.

ENCOURAGING WORD FROM DIXIE

Santa Clara, Washington County.
Editor Deseret Farmer:

We have been trying dry farming here on the Clara bench and succeeded this year in getting some nice beardless barley, which attained a growth of about three feet. The barley was cut during the last week

in May, and made a splendid yield. We also secured some Red Chaff wheat, which was cut during the first week in June. This field of wheat will average at least fifteen bushels of wheat to the acre.

These results have been made in this climate through the encouragement we receive from the Deseret Farmer. Though some of our good neighbors laugh at us, yet we feel highly encouraged over the results. This fall we are going to plant some lucern, and we will also plant some Lofthouse and Turkey Red wheat. Would like very much for you to advise us through the "Farmer" if there is any wheat you think earlier and better for this climate and sandy ground; also is it a good thing to harrow land after it is and has been dry?

Wishing the Deseret Farmer the success it deserves.

Fred K. Reber Jr.

Answered by the Editor:

The fact that wheat can be grown without irrigation in Utah's Dixie land, is rather astonishing, even to the writer of this, who is an optimist on the subject of dry farming. We are glad to learn that our correspondent is going to try Turkey Red wheat. From some experiments recently had, we are convinced that the Turkey Red will give better results than either the Red Chaff or Lofthouse.

It is certainly a good plan to harrow the ground when it becomes baked. We visited a field out in the middle of the desert last week that has received a splendid fallow during this season. The ground was plowed last fall, and during this season, it has been disced twice and harrowed twice, and though there has been a very light rainfall for three months, yet at the time of our visit during the first week in July, the soil was full of moisture. The moisture certainly can be retained in the soil, if harrowing is frequently resorted to. Harrow the ground, and harrow again. Harrow the wheat when it is too thick, and harrow when it is too thin. Success in dry farming, if it could be embodied in one word, would be attained by harrowing.